

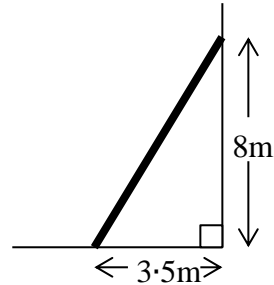
National 4 Homework 27

Questions 1, 3, 4, 5 and 6 are Non Calculator

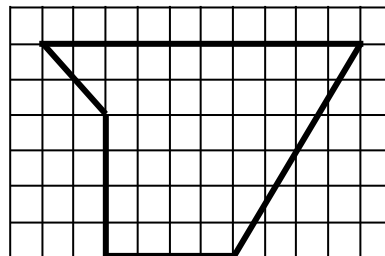
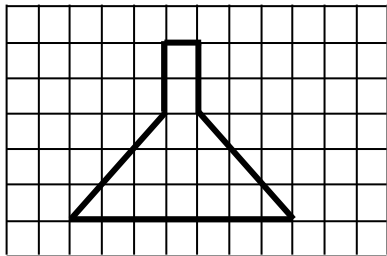
1. Write in scientific notation (a) 754000 (b) 0.000054 (c) 35 million.

2. A ladder is leaning against a wall.
The foot of the ladder is 3.5m away from the base of the wall
and it reaches a height of 8m above the ground.

Calculate the length of the ladder.



3. (a) Draw an enlargement of the shape shown below using a scale factor of 3.
(b) Draw a reduction of the shape shown below using a scale factor of $\frac{1}{2}$.



4. Factorise

- (a) $35p + 42$ (b) $12 - 20x$ (c) $24a + 32b$ (d) $5 + 25x - 40y$

5. Solve for x.

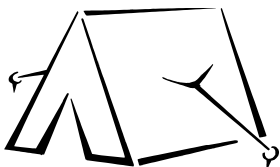
- (a) $13x - 2 = 6x + 19$ (b) $7x - 3 > 39$ (c) $5(3x + 4) = 2(3x + 19)$

6. (a) Copy and complete the table below for $y = \frac{1}{2}x - 2$.

x	-2	0	8
y			

- (b) Using the answers in the table above and a ruler, draw the line $y = \frac{1}{2}x - 2$ on coordinate diagram in your jotter.

- 7.



A tent is in the shape of a triangular prism.
The end face is in the shape of an isosceles triangle with
a width of 6m and a sloping side length of 4m.

Calculate the height, h, of the tent.

